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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,775	02/18/2004	Floyd Backes	160-028	2754

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EXAMINER	
PHILPOTT, JUSTIN M	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/780,775	BACKES ET AL.	
	Examiner	Art Unit	
	Justin M. Philpott	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 2, 2006 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection. Specifically, the newly added limitations of "logic operative to adjust transmission power if the alternative access point indicates that the wireless deice can become associated with the alternative access point" in independent claim 1, which applicant argues is not taught by the previously cited prior art, is clearly taught by the newly cited art of Klein et al. as discussed in the following office action. Accordingly, applicant's argument is moot.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2003/0036374 by English et al. in view of U.S. Patent No. 6,144,855 to Slovin, further in view of U.S. Patent Application Publication No. US 2003/0100328 A1 by Klein et al.

Regarding claim 1, English teaches an apparatus for use by a wireless device (e.g., mobile node 902a, see FIGS. 9 and 10) in a wireless communications environment including multiple access points and stations, wherein stations gain network access by associating with one of the access points, comprising: logic for associating the wireless device with a current access point on one channel (e.g., see paragraph 0170, particularly lines 9-17 regarding mobile node 902a associating with one of access points 904a or 904b, inherently comprising a respective channels within respective radio coverage areas 1012 and 1014; see also paragraphs 0076, 0100, 0141 and 0163 regarding channels); logic for ascertaining by the wireless device whether the wireless device should attempt to associate with an alternative access point operating on an alternative channel (e.g., see paragraph 0170, particularly lines 9-17 regarding mobile node 902a makes the decision of which access point 904a or 904b to associate with, inherently comprising a respective channels within respective radio coverage areas 1012 and 1014; see also paragraphs 0076, 0100, 0141 and 0163 regarding channels); and logic for requesting association with the alternative access point operating on the alternative channel if it is ascertained that the wireless device should attempt to associate with the alternative access point (e.g., see paragraph 0180 regarding the handoff of communications to a new access point; see also generally paragraphs 0146-0181).

However, English may not specifically disclose the ascertaining is based at least in-part on signal strengths of transmissions from the current and alternative access points.

Slovin, like English, also teaches an apparatus for use by a wireless device for associating with access points (e.g., see col. 1, line 35 – col. 4, line 35), and specifically discloses the well known teaching for ascertaining to be based at least in-part on signal strengths of transmissions from a current and an alternative access point (e.g., see col. 9, lines 6-24 regarding selecting the best access point according to the RSSI, and see col. 1, lines 62-63 clearly identifying the term of art RSSI as "radio signal strength intensity"). Additionally, the teachings of Slovin provide an equalized ratio of available channels and demanded channels over a plurality of stations and a plurality of access points, for overall improved operation (e.g., see col. 1, lines 35-58 as well as col. 1, line 59 – col. 4, line 35). Thus, at the time of the invention, not only was it well known in the art for ascertaining to be based at least in-part on signal strengths of transmissions from a current and an alternative access point (e.g., see col. 9, lines 6-24 regarding selecting the best access point according to the RSSI), it would further have been obvious to one of ordinary skill in the art to associate access points as taught by Slovin in order to provide an equalized ratio of available channels and demanded channels over a plurality of a stations and a plurality of access points, for overall improved operation (e.g., see col. 1, lines 35-58 as well as col. 1, line 59 – col. 4, line 35).

However, English in view of Slovin may not specifically disclose logic operative to adjust transmission power if the alternative access point indicates that the wireless device can become associated with the alternative access point.

Klein, like English and Slovin, also teaches an apparatus for use by a wireless device for associating with access points (e.g., see abstract). Further, Klein specifically teaches logic operative to adjust transmission power if an alternative access point indicates that a wireless device can become associated with the alternative access point (see paragraph 0019 regarding "the transmitter power level of mobile units 14 is adjusted in accordance with the power level set by the power level data 26 of the access point transmitters with which the mobile units are associated or about to become associated with"). Additionally, the teachings of Klein provides transmitter power level control for power conservation and avoidance of radio interference within the network (e.g., see Klein at paragraphs 0001-0010). Thus, at the time of the invention it would have been obvious to apply the wireless communication techniques of Klein to the wireless communications of English in view of Slovin in order to conserve power and avoid radio interference within the network (see Klein at paragraphs 0001-0010).

Regarding claim 2, English teaches logic for automatically collecting, by the wireless device, information about access points operating on other channels (e.g., see paragraph 0178 regarding mobile node 902 being informed about information regarding access points 904a, 904b and 904c; and also paragraphs 0076, 0100, 0141 and 0163 regarding channels).

Regarding claim 3, English teaches the logic for ascertaining ascertains that the wireless device should attempt to associate with the alternative access point operating on the alternative channel if the alternative access point on the alternative channel is closer than the current access point (e.g., see paragraphs 0170-0180 regarding mobile node 902 determining which access point to associate with based upon proximity to the access points).

Regarding claim 4, English teaches the ascertaining is by calculating a first biased distance between the wireless device (e.g., mobile node 902) and the current access point based on "x" samples (e.g., see paragraphs 0167-0168 and 0175 regarding the impulse radio unit 1016 within mobile node 902 triangulating the current position of the mobile node 902, inherently comprising three or more samples); calculating a second biased distance between the wireless device and the alternative access point operating on the second channel based on "y" samples (e.g., see paragraphs 0175-0180 regarding mobile node 902 estimating such a distance by comparing the current position of the mobile node 902 with a map generated in step 1104 of FIG. 11 which comprises the position of a different access point such as 904b or 904c) where "y" (e.g., known position of mobile node 902 and known position of access point 904b) is less than "x" (e.g., three of more samples for triangulating the current position of mobile node 902); and ascertaining that the alternative access point operating on the second channel is closer than the current access point if the second biased distance is less than the first biased distance (e.g., see paragraphs 0164-0181, particularly paragraphs 0170 and 0175-0180 regarding mobile node 902 determining which access point to associate with).

Regarding claim 5, English teaches sending a message to the alternative access point operating on the alternative channel (e.g., see paragraph 0171 regarding mobile node 902a deciding to associate with a different access point and handing off communications to the different access point after authenticating with the different access point).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

6. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

7. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application Nos. 10/780,804; 10/781,121; 10/781,157; 10/781,214; 10/781,250; and 10/781,284 in view of U.S. Patent Application Publication No. US 2003/0100328 A1 by Klein et al.

9. Specifically, Application No. 10/780,804 comprises independent claim 1 which is essentially identical to claim 1 of the instant application, whereby the primary difference is that the latter application refers to "second channel" while the instant application refers to "alternative channel". At the time of the invention it would have been obvious to one of ordinary skill in the art for a "second channel" to be an "alternative channel" since secondary options are, by definition, alternative options.

Additionally, the claims of Application Nos. 10/781,121 and 10/781,250 are identical to claims 1-5 of the instant application with the exception that the preamble of the claims of the latter application recites a "program product" whereas the preamble of the claims of the instant application recites an "apparatus". At the time of the invention it would have been obvious to one of ordinary skill in the art to implement a program product within an apparatus since one of

ordinary skill in the art readily recognizes that a program may advantageously performed within an apparatus to provide functionality for the apparatus.

Further, the claims of Application Nos. 10/781,157 and 10/781,214 are identical to claims 1-5 of the instant application with the exception that the preamble of the claims of the latter application recites a "method" whereas the preamble of the claims of the instant application recites an "apparatus", and the instant application includes the additional language of "logic for". At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize an apparatus for performing a method since one of ordinary skill in the art readily recognizes that an apparatus may advantageously perform steps of a method in order to provide a functional operation. Further, At the time of the invention it would have been obvious to one of ordinary skill in the art to implement steps of an invention within logic since one of ordinary skill in the art readily recognizes that it is well known in the art to implement steps of invention with logic in order to perform the invention.

Still further, the claims of Application No. 10/781,284 are identical to the claims of the instant application with the exception that the claims of the instant application recites the additional limitations of one channel and an alternative channel. At the time of the invention it would have been obvious to one of ordinary skill in the art to remove the limitation of being restricted by a particular first and second channel configuration in order to implement the invention in a single-channel system since one of ordinary skill in the art readily recognizes that a communications system may comprise any number of channels depending upon the number of devices communicating within the system.

Finally, with respect to all of the above-mentioned co-pending applications, while each may not specifically disclose logic operative to adjust transmission power if the alternative access point indicates that the wireless device can become associated with the alternative access point as newly recited in claim 1 of the instant application, Klein specifically teaches it is known in the art to adjust transmission power if an alternative access point indicates that a wireless device can become associated with the alternative access point (see paragraph 0019 regarding "the transmitter power level of mobile units 14 is adjusted in accordance with the power level set by the power level data 26 of the access point transmitters with which the mobile units are associated or about to become associated with"). At the time of the invention it would have been obvious to one of ordinary skill in the art to include disclose logic operative to adjust transmission power if the alternative access point indicates that the wireless device can become associated with the alternative access point in each of the above-mentioned co-pending applications since such teachings are well known in the art as disclosed by Klein.

10. This is a provisional obviousness-type double patenting rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571.272.3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin M. Philpott